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This study, conducted under a grant from the Cooperative Research Program of the U.S. Office of Education, was designed to correlate the results of three separate structured interviews with entrance into and persistence in teacher education. It sought answers to three general questions: (1) What is the influence of interview content on judgment and predictions concerning students seeking admission? (2) What is the influence of the counselor himself on these same judgments and predictions? and (3) What is the contribution of the interview to predictions of persistence in education? Results of the experiment demonstrated that the interview added information upon which counselors relied to make judgments and predictions concerning applicants for admission to professional courses in teacher education. When predicting *persistence* in the college program, the interview as a basis for prediction did not elicit different predictions from those made by counselors on the basis of test scores and achievement data, but the interview did cause the counselor's predictions of *entrance* into a teaching position to be significantly different.

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COOPERATIVE RESEARCH PROJECT #173

DR. WILLIAM H. EDSON

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AN EXPERIMENTAL STUDY OF THE ADMISSIONS INTERVIEW IN TEACHER EDUCATION FOR PREDICTING SUCCESS IN TEACHING

by
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Conducted Under a Grant
from the

Cooperative Research Program
U. S. Office of Education
Dept. of Health, Education, and Welfare

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FOREWORD

The experiment reported in this monograph was made possible by funds from the U. S. Office of Education Cooperative Research Program and was conducted under a research contract between the U. S. Office of Education and the University of Minnesota. Publication of this report provides an opportunity for expressing appreciation for the Cooperative Research Program and affirming its value in promoting needed research in education.

The staff of the Student Personnel Office of the College of Education were all an active part of this study as it progressed through its various stages. The counselors in the office, Thomas R. Buran, Charles J. Glotzbach, Joe Hogan, Frederick C. Markwardt, Myrne B. Nevison, and Joseph P. Schnitzen are due especial acknowledgment. They participated in the construction of the structured interviews, conducted interviews in the experiment, and made the necessary ratings and predictions. The preparation of materials and the tabulation of the data were carefully done by Mrs. Patricia McCaulley, Neal Johnson, Miss BarBara Arndt, and the clerical staff.

The statistical model for the experiment was outlined by Dr. Raymond O. Collier, Jr., associate professor of Educational Psychology. For assistance in the statistical calculations and programming the data, acknowledgment is given Robert Gueydan, Joe Hogan, and Frank Baker.

Preparation of the manuscript was ably done by Mrs. Sharon Schmidt and Mrs. Beverly Raymond.

Acknowledgment is also given to Dean Walter W. Cook of the College of Education who has provided the impetus for a series of research projects in in the Student Personnel Office of which this study is one part.

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THE SUMMARY OF THE EXPERIMENT

In 1957 the Student Personnel Office of the College of Education at the University of Minnesota began a longitudinal study of its students and of its methods of student appraisal. The present study deals with the admission interview, one aspect of the longer study. Since 1947, counselors of the Student Personnel Office have employed the interview as one step in the process of selective admission. These years of experience have provided the background from which this study has grown.

The Design

The present study was designed to suggest answers to three general questions: 1. What is the influence of interview content on judgments and predictions concerning students seeking admission? 2. What is the influence of the counselor himself on these same judgments and predictions? 3. What is the contribution of the interview to predictions of persistence in teacher education?

One of the concerns of the longitudinal program of which this study is a part is the persistence of students through undergraduate teacher preparation and into teaching. The criterion of persistence, then, became a primary consideration in formulating a conceptual framework for this study. The propositions advanced may be stated as follows:

1. If a student is to complete a program of teacher education, he must possess at least two characteristics:
    a. The potential for college achievement (Ach p).
    b. The motivation for college achievement (n Ach).

2. If an appropriately prepared person is to enter teaching, he is motivated by one of the two characteristics that follow:
    a. A need to work with people. This may stem from either:
        1) A need to dominate others (n Dom) or
        2) A need to help others grow and to be a socially intergrative factor (n Intg).
    b. A desire for security (p Sec).

To enable the counselor to make judgments about the prescence of these variables, three structured interviews were devised, one which dealt with perceptions of self, a second with perceptions of children and a third with perceptions of teachers. Each of the interviews contained sections concerned with achievement and with problems of interpersonal relations. The first and third interviews also contained a section on values. Other information available to counselors included the achievement and test score data as well as biographical data.

In addition to its concern with the five personality variables and the predictions of persistence, the study examined the relationship between each of the three interviews and a standardized inventory presumed to be relevant. After the selection of the three inventories and development of the three interviews, a series of staff meetings were held with the seven counselors to familiarize them with the interviews, and to establish rules and procedures that would standardize interviewing and rating.

Counselor-interview combinations (7 counselors x 3 interviews = 21 combinations) were set up, and ordered lists of these combinations prepared using a table of random numbers. The 167 sophomore men and women who wished to prepare for teaching in the elementary school and who were seeking admission to the first course in the professional sequence were then given appointments as they came to the office. Students were assigned to a counselor and to an interview topic following the randomly ordered lists, thus insuring the random placement of students in a counselor-interview combination.

At the conclusion of each interview the counselor rated the applicant on each of the five behavior variables, using a five-point scale. He also responded "yes" or "no" to the questions "Do you think this student will graduate from the College of Education" and "Do you think that this student will enter teaching?" On a three-point scale, "very certain," "somewhat certain" and "not at all certain" he indicated how sure he was of his prediction in each instance.

Upon completing the rating sheet, the counselor turned to a report of the test scores for the applicant and with this new information filled out a second rating sheet asking for judgments on the same variables. Four weeks later counselors were given the test data sheets for the subjects they had seen and, with identifying names coded, they were asked to make the ratings once more on the basis of test data only. This last step completed the counselor judgments made on the three different bases.

The Results

The two-way analysis of variance of each of the five behavior variables, Achievement potential, need Achievement, need Dominance, need Integration, and need Security, showed that there were no significant differences among the mean ratings of these variables, except for need Dominance, that could be attributed to interviews of different content or to different counselors. A study of the intercorrelations between judgments of these variables made on the three different bases, interview only, test data only, and interview plus test data, showed that counselors depend on the interview to assess the latter three variables but they depend on test and achievement data for judgments concerning the two achievement variables.

Separate analyses of the predictions of persistence in the college program of teacher education and entrance into the field of teaching were completed using a design which permitted a test of the effects of counselors, interview content, the basis for predictions, and appropriate interactions. The results showed that both the predictions of persistence in the teacher education program and the predictions of entrance into teaching were significantly different among the counselors. Some counselors were willing to predict with a greater degree of certainty than others. When predicting persistence in the college program, the interview as a basis for prediction did not elicit different predictions than those which counselors made from test scores and achievement data, but the interview did cause the counselors' predictions of entrance into a teaching position to be significantly different.

Results of this experiment demonstrated that the interview added information upon which counselors relied to make judgments and predictions concerning applicants for admission to professional courses in teacher education. Counselors were reliable in their ratings of all but one variable. The study did not show, however, that the three structured interviews had differential effects on judgments, nor did it find that the interviews were related to object tests having similar purposes. Further studies, some of which are in progress, are needed to determine how the content of the interview is related to judgments made and how well the judgments predict subsequent behavior.

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CHAPTER I

THE SETTING AND THE PROBLEM

Through the years men have used the interview as a basis for making decisions about other men. Only within the last two decades, however, have the social sciences begun to realize the variety of its potentialities. For the past ten years the staff of the College of Education at the University of Minnesota have used the interview to gain information and form impressions about applicants for admission to teacher education programs. Despite this extensive use, little has been done to refine the interview as an assessment technique.

Interest in the development and study of structured interviews came about in the Student Personnel Office of the College of Education, because its staff of trained student personnel workers have chief responsibility for the selective admission of students for the teacher education curriculums. Although authority in selection lies with the college Admission Committee and its parent committee, the Committee on Student Personnel and Recruitment, the professional staff obtain all the information for the records upon which committee decisions are based. Counselor judgments are a part of this record. This study, then, was of interest to each counselor since it has to do with his daily work and was an attempt to improve his practice within the framework of regular office procedures.

Sophomore Clearance Procedures

In order that the nature of the study may be understood, it is important that the setting be stated. For students in the College of Education the first professional course sequence in scheduled in the junior year. Students seek formal admission to this sequence when they have completed two years of prerequisite work. In addition to the biographical data and college transcripts included in the application students take a series of psychological tests and have speech, hearing and health examinations. They are then interviewed both by a counselor in the Student Office and by a faculty advisor in their major area of study.

The pivotal element in these clearance procedures is the admission interview conducted by the counselor in the Student Personnel Office. It not only provides an opportunity to integrate psychometric and biographical data, but it also permits the collection of additional information about the candidate's motivations and decisions that have led to the application. From his synthesis of the data, the counselor must prepare a recommendation. This recommendation is based on academic eligibility, prediction of scholastic success and suitability for teaching. The counselor's judgment, along with the recommendation of the faculty advisor, becomes the basis for admission to upper division professional courses.

Questions to be Studied

As part of the continuing program conducted by the Student Personnel Office to increase its effectiveness, a series of staff meetings in the spring of 1956 focused attention upon the sophomore clearance interview. During the fall quarter of that year the second author was given time by the Dean of the College of Education to formulate research proposals that would supply basic student personnel data for the more effective selection of students seeking admission for teacher preparation. Because of the importance of the interview, it became the first topic of concern.

Study and discussion led to three broad questions of primary interest. First, is the content of the interview related to the judgments made about students? This implies that a counselor's judgments about an applicant might be dependent upon the topics discussed in the interview. Case notes show that interviews have frequently dealt with motiviations for teaching, leadership experiences, attitudes toward children, attitudes toward college study, and attitudes toward self.

Second, to what extent is the counselor himself a significant factor in the predictions of judgments he makes? Studies of the counseling interview have shown that trained counselors are reliable in their judgments about various aspects of the interview. Because the admission interview has little relationship to therapeutic counseling and is more accurately represented as appraisal or diagnosis, existing studies cannot adequately answer this question.

Third, what is the contribution of the interview to prediction? To what extent does the interview supplement psychological test Data? This question is related to the "clinical vs. statistical prediction" controversy which is of current interest. The differences in settings and criteria make it desirable to submit the question to test.

Conceptual Framework

Answers to the three questions that have been stated require the specification of interviews with different content, the selection of variables upon which counselors may be found to vary, and identification of the different bases for prediction. It is the purpose of this section to describe the conceptual framework from which the variables of the study were derived.

This project is a phase of a broader study concerned with the persistence of students through undergraduate teacher preparation and into teaching. Factors thought to be associated with this persistence are the basis for the development of the scales of measurement. It is readily acknowledged that persistence as a criterion is inadequate from at least one point of view. It would be preferable to use teaching effectiveness were it not that conceptualizing and identifying the presence of this complex has been inadequate to produce significant results.

Persistence as a criterion has a great deal of practical value. From the point of view of teacher education institutions, it would be helpful to be able to identify those students who have little likelihood of completing the curriculum or entering teaching. If there is no satisfactory way to identify those factors associated with effectiveness, then energies and resources are most wisely spent on those who will stay in the profession.

Following this line of thought and drawing primarily from the work of Murray (20) and Anderson (2, 3, 4) the following propositions were formulated.

1. If a student is to complete a program of teacher education, he must possess at least two characteristics:
   a. The potential for college achievement (Ach p)
   and
   b. The motivation or need for college achievement (n Ach).
2. If an appropriately prepared person is to enter teaching, he is motivated by one of the two characteristics that follow:
   a. A need to work with people. This may stem from either:
      1) A need to dominate others (n dom) or
      2) A need to help others grow and to be a socially integrative fac;tor in their growth (n Intg).
   or
   b. A desire for security (p Sec).

The first proposition recognizes that there are other unspecified factors that may influence the completion of a teacher education program. The statement assumes that these unspecified factors may be different from individual to individual, but all individuals must possess both of the specified factors. It is held that these are minimal factors without which an individual cannot achieve at the required level of teacher preparation.

The second statement proposes two motivating factors which propel people into teaching, either to satisfy personality needs or to acquire the advantages that normally come to teachers. There well may be other factors that are of importance, but these are held to be the primary bases. The desire for security is particulary evident in women who choose teaching because of its salary and working conditions in relation to other professions for women. On the other hand, the "dedication" of those who forego other types of rewards to continue working with boys and girls is well known. Those who enter teaching from such strong social service motives may represent two different personality dynamics, however, and the distinction made in the second proposition follows that found in the research of H. H. Anderson (2, 3, 4) and others.

It is important to note that this formulation conceives of these two propositions as being independent. The motives necessary for entrance into teaching are not seen as essential in completing preparation for teaching.

In considering the content of an interview as a means of assessing the variables described above, some rationale is required for the selection of relevant interview structures. Accepted here is the premise that the presence of the variables is evident in an individual's perceptions of himself and his environment. It is assumed that the most pertinent aspects of the environment are the pupils and the teaching staff. Thus, perceptions of self, of children and of teachers are taken as the three aspects of a person's views of himself and his world which become important expressions of the variables described. This point of view follows essentially that of the self theory of personality that has been developed most fully by Carl R. Rogers (21).

Summary

This chapter has presented three questions that have risen in considering the use of the admission interview in the selection of candidates for teacher education. It has stated the conceptual framework that will serve as the basis for the construction of scales to measure the differences in the levels of the variables under study.

CHAPTER II

THE EXPERIMENT

The preceding chapter outlined the setting for the experiment and developed the conceptual framework that underlies it. This chapter will present the design of the experiment, describe the sample, discuss the instruments and explain the procedures.

The Design

The first two questions posed in Chapter I specified that data from the interview be gathered so that variations due to different counselors and to different interviews could be assigned. It was also essential to be able to test for the existence of any significant interaction between counselors and interviews.

The most straight forward solution was to consider a particular counselor, j, administering an interview, k, as a treatment combination. The assignment of subjects at random to one of the jk treatments insures that variations not taken into account in the design are randomly distributed. In addition, the order of assignment of subjects to a treatment combination was controlled by assigning one subject to each of the jk combinations before a second assignment was made to any one of the combinations. By utilizing this design it was possible to make a statistical test of the null hypotheses concerning differences amoung counselors, interviews and the interaction between them by a two-way analysis of variance.

To find the contribution of the interview to predictions of persistence through the teacher education program and into teaching required additional design considerations. Data were gathered so that the analysis could isolate the effect of basis for prediction, l, and the type of prediction, m. The three bases for prediction were test scores only, interview only and interview plus test scores. It is apparent that these different bases for prediction are not independent because they are made by the same counselor; thus a correlation between the levels of l, bases for prediction, is assumed to exist. This study made separate analyses of the two types of predictions, m. Predicting whether a student will graduate or teach are two different problems, even though related. The statistical tests of the null hypotheses regarding these sources of variation, taking into account the specified correlation, were made according to the model for the analysis of correlated designs which will be presented in the chapter with the analysis.

The Sample

The results of some studies of education students have been adversely affected by the heterogeneity of the subjects who were chosen from the various elementary and secondary curriculums. For this reason it was decided that only students in closely related teacher education curriculums would be studied. Subjects chosen were majors in elementary and nursery-kindergarten-primary education. Students in these curriculums normally enter the College of

Education as freshmen and spend four years in the College. The sophomore clearance procedure described in Chapter I is required at the end of the sophomore year for all students in these curriculums. It is this group of sophomores who were seeking admission to the junior year in the two types of elementary education curriculums that comprised the sample.

The total number who were notified during the winter quarter, 1957, that they must complete sophomore clearance during spring, 1957, was one hundred ninety-four. One hundred sixty-seven students completed sophomore clearance in the two curriculums described. Approximately one-fourth or forty-one were nursery-kindergarten-primary majors, the remainder in elementary education.

The Variables

Chapter I has outlined the conceptual framework for the study. Five variables were introduced which are to serve as the basis for the measurement of behavior. In addition, the first chapter proposed questions concerning counselors' predictions of persistence using different bases for the judgments. This section will give further definition to these two sets of variables.

Behavior variables. To give the counselors a clear and uniform interpretation of the five variables, need Achievement, Achievement potential, need Dominance, need Integration, and press Security, descriptive phrases were compiled for each variable, primarily from the work of Murray and H. H. Anderson. The descriptions as prepared and used by counselors are as follows:

Ach p (Achievement potential)
- scholastic ability for college
- energy, enthusiasm, alertness

n Ach (need Achievement)
- curiosity, need for understanding (feels need to find answers regarding own requirements, assignments, etc.)
- importance of doing well in what is attempted
- importance of college education

n Dom (need Dominance)
- sets definite structure and organization
- sets high standards
- provides rules, regulations, procedures
- interaction with pupils often characterized by
  1. persuasion, prohibition, commands
  2. blame, criticism, sarcasm
  3. threats, withholding approval
  4. lack of regard for student feeling
  5. intolerant of differences

n Intg (need Integration)
- sets broad structure and organization
- provides for differentiation of tasks
- seeks common purpose in student differences
- flexibility of standards
- interaction with pupils characterized by
  1. support, encouragement, praise
  2. freedom of student expression
  3. attention to student feelings
  4. encouragement of differences of approach
  5. promotion of acceptance of others

p Sec (press Security)
- teaching is "something to fall back on" (implying other primary goals)
- view of teaching as "a good deal," i. e. acceptable salary, long vacations, what better could women do?
- choice of teaching

The foregoing descriptions were used by the counselors in quantifying the variables. Scaling, using a five point scale, was accomplished by considering that the descriptions were the models for assigning top scale values. No attempt was made to describe other scale positions. Low values were considered to indicate that little or none of the quality described was present. No assumptions were made concerning the relationships between the variables, except that there would be a negative correlation between need Dominance and need Integration. This would mean that the only unlikely combination of these two scales would be for an individual to have a high rating on both scales. Actual interrelationships of the scales will be presented in the following chapter.

Prediction variables. To quantify predictions concerning a student's graduation from the College of Education, counselors answered the following questions.

> Do you think this student will graduate from the College of Education?
>
> Circle: Yes No
>
> How sure are you of this judgment?
>
> | | | |
> |---|---|---|
> | Very
Certain | Somewhat
Certain | Not at all
Certain |

The same format was used for predicting entrance into teaching. Because persistence is the criterion, scale values were assigned in the following manner:

Judgments	Scale Values
Persistence - very certain	6
Persistence - somewhat certain	5
Persistence - not at all certain	4
Non-persistence - not at all certain	3
Non-persistence - somewhat certain	2
Non-persistence - very certain	1

The assumption of equal intervals between the scores was not felt to be a serious violation of the nature of the data. Quantification of the data in this way was preferable to using a two-way contingency table to describe a judgment, because necessary analyses, to be specified later, would have been extremely difficult, if not impossible, using non-parametric methods. By using the above scoring system, analysis of variance was used and the sources of variation thought to be important were partialled out.

The Instruments

The Interviews. The task of building the structured interviews to assess perceptions of self, of children, and of teachers was carried on jointly by the counselors in the Student Personnel Office and the project staff. The initial step was to build a pool of interview questions which in the counselors' experiences were effective in judging suitability for teaching. In staff meetings the counselors discussed these questions at length, considering their appropriateness, their phrasing, and possible arrangement. Using these discussions as a basis, the preliminary interview forms were built, and counselors used them with a number of students to try them out. Critiques of the preliminary form were the basis for preparation of the final forms.

Appendix A contains a copy of each of the three interview forms, each having the same introductory statement used by the counselors. The questions in all of the interviews were paired. Generally the second question of the pair was phrased to elicit a further or expanded response to the first question to enable the counselor to get a more complete response from the student. In some pairs of questions the second of the two presented a different approach to the topic of the first question or a specific example of a more general first question.

The content of the interviews was divided into sections designated by capital letters. The questions in section A of all three interviews dealt with achievement, each interview maintaining its own focus. Section B dealt with problems of interpersonal relations, and Section C pertained to question of values. Section C did not appear in interview II. The assumption was that students' responses to questions in a section would be important in making ratings of the variables whether the questions ask specifically about their behaviors or ask their interpretation of others' behaviors.

The Tests. Test data used by counselors in making ratings on behavior variables and judgments of persistence were those normally used in sophomore clearance procedures. No special tests were administered because the study proposed to use data normally available.

Prior to making an appointment, each subject was required to complete four psychological tests, speech and hearing tests and a health examination. The four tests included the Miller Analogies Test, Form A; the Cooperative Reading Comprehension Test, Form C2R; the Minnesota Teacher Attitude Inventory (MTAI); and the Minnesota Multiphasic Personality Inventory (MMPI). Because these are well known standardized tests and full descriptions are readily available elsewhere, no further discussion of these tests will be presented here.

Additional data were available for those students who were admitted to the College of Education as freshmen and those who were graduates of Minnesota high schools. Entering freshmen completed the following tests: the Ohio Sate Psychological Test, the Cooperative Reading Comprehension Test, the Strong Vocational Interest Blank, the Minnesota Teacher Attitude Inventory, and the Minnesota Multiphasic Personality Inventory. Graduates of Minnesota high schools had data available from the state wide testing program. These data include the high school rank (HSR), the American Council on Education Psychological Test, and the Cooperative English Test, Form Z.

One aspect of this study will be to find the relationship between the data gathered from the three structured interviews and psychological tests which are designed to measure variables similar to those of the interviews. Tests which will be used for this purpose will be the MMPI, the MTAI, and the Teacher Opinion Inventory. Because the latter test is of recent origin and as yet unpublished, some description of the instrument is needed.

The Teacher Opinion Inventory was constructed by Bowers (5) as a part of his doctoral research. The purpose of the instrument was to differentiate between "better-satisfied" and "less-satisfied" teachers on the basis of their attitudes toward the teaching profession. The criteria taken to be indicative of satisfaction were:

> "1. The satisfied teacher remains in teaching in spite of economically more lucrative opportunities in other occupations;
>
> 2. The satisfied teacher performs social service to the community beyond the demands of the classroom;
>
> 3. The satisfied teacher has obtained specialized professional education which differentiates him from other teachers;
>
> 4. The satisfied teacher is an active teacher in his professional organizations;

5. The satisfied teacher attempts to improve his professional techniques and keep abreast with professional developments" (6, p 127-28).

Bowers' study showed his instrument to have an internal consistency reliability coefficient of .96. The data in the study warrant the tentative conclusion that the Inventory has acceptable content and concurrent validity when compared with the criteria.

The Procedures

Each student who was classified as a sophomore in the College of Education at the beginning of winter quarter, 1957, was requested to complete the sophomore clearance requirements during the spring quarter. These students received a letter a letter of instructions from the Student Personnel Office giving details for the completion of psychological tests, speech and hearing tests, health examination, and interviews with a counselor and an advisor in the major field of study.

Appointments with the counselors in the Student Personnel Office were made for students in the sample according to the following plan. Several ordered lists of the twenty-one counselor-interview combinations, previously described, were prepared. The order was determined using a table of random numbers. As subjects in the sample came to make appointments, they were given the first unassigned place on the list. When one subject had been assigned each counselor-interview treatment, a second list was filled. By assigning subjects to treatments in this manner, factors that may have been associated with the time an appointment was made were controlled. This plan randomly placed the student in one of the counselor-interview combinations.

Special staff meetings were held to make the counselors thoroughly familiar with the interviews. In addition, special instructions were developed so that the procedures for each hour's interview would be conducted in as similar a manner as possible. The following instructions were given to outline the procedures the counselors were to follow.

1. After the student comes into your office, proceed directly to the interview. The secretary will have all the materials on your desk.
2. After you have completed the interview and BEFORE YOU FILL OUT THE RATING SCALES, give the student the word completion test.[1]
3. Fill out the rating scale that follows the interview schedule.
4. Turn to the next section that contains test scores, profiles and achievement information. After studying this information, make the second rating sheet WITHOUT REFERRING TO THE FIRST ONE.
5. When you have finished and the student has finished, and if there is time, you might ask the student if he has any questions.
6. Enclose the yellow sophomore clearance sheet in an envelope addressed to the faculty advisor.
7. RETURN ALL MATERIALS TO THE SECRETARY'S DESK WHEN THE STUDENT LEAVES.

---

1. This test was used for another study and was not a part of this project.

In addition to the standardized instructions, a set of "ground rules" were formulated to specify the treatment of specific problems that had been encountered in the conduct of trial interviews. This was a further attempt to insure that the interviews would be conducted in a like manner by all counselors. A copy of the "ground rules" follows.

INTERVIEW PROJECT GROUND RULES

INFORMATION

The revision of the interview schedule has not basically changed the questions, but the format is a little different. The questions have been paired. In each case a more general question precedes a more specific queary. In many cases the second question is a general non-directive type question; in others, the attempt to point toward a more specific response.

SHORT ANSWERS

Any question that is answered by a short response, e.g. "No, I don't think so," or "I think that is very important," should be followed by a non-directive question. If the non-directive question is a part of the pair of questions, this makes provision for getting further response.

OMITTING QUESTIONS

If in the counselor's judgment, the student has completely answered the second of the pair of questions, it may be omitted. The second question is provided for the most part to insure that more than a short answer will be given. If the second question is more than a non-directive question asking the student to further explain what he has said, it would be best to make no assumptions about the completeness of the first response. When in doubt, ask the second question.

STOP TIRADES

If the student is prone to expound beyond that which is necessary to give evidence of his feelings regarding a particular question, suggest this (or a similar remark): "I think we have explored this question enough. Let's proceed to the next one."

IF ANSWERS ARE OFF BEAT

If the student's response does not seem to be getting to the point of the question, the counselor should suggest that he has missed the point, e.g. "I'm not sure that you understand the question. Let me repeat it for you."

"WHAT DO YOU MEAN BY____________"

It may be that students will ask for further clarification of the meaning of parts of the questions. If that happens, counselors should suggest that a response to the question as given is desired. For example, the counselor might respond, "Whatever you think it means is fine. Let me repeat the question again for you."

CLOSING

At the end of the interview you might be able to get into the test which follows something like this: "This finishes this part of our interview. While I get the yellow sheet ready for your advisor, I would like you to do this little project."

A PLEA

Please write down what you consider to be the important aspects of the responses. Don't try to get it verbatim. Try to get the affect. PLEASE WRITE AS LEGIBLY AS POSSIBLE.

If the student missed the assigned interview, he was notified to come to the Student Personnel Office to make another appointment. He was not given another counselor-interview, however, but another suitable time was found when the subject could complete the one originally assigned.

Thus far, this section has described the procedures used in this project to insure that interviews were assigned and conducted in a manner consistent with the requisites of the design. This was to protect the data against contamination by unspecified conditions. Because data from the interview completed only one phase of the project, similar precautions were taken in collecting the other data. The design called for counselor ratings of students and predictions of their persistence on three bases: test results, the interview, and the interview plus test scores.

Appendix A contains a copy of the data sheet used to report test results for use in the study and the instruments have been discussed. To insure that test results would be complete, subjects were required to complete the tests before the appointment for the interview was made. The instructions to counselors which were reproduced above have suggested the procedure. The counselor first conducted the interview and made his ratings and predictions on this basis. After completing the judgments based on the interview, he considered the test results which were appended to the interview. Ratings thus made were from interview data plus test scores. About four weeks later counselors were given the test data sheets for the subjects they had seen. The data was coded so that no names appeared and ratings were made again on the basis of test results only. This last step completed the counselor judgments made on the three different bases.

Summary

This chapter has outlined the design of the experiment and described the sample that was randomly assigned to the treatment combinations. The variables which were used in making ratings of behavior and predictions of persistence were described, as were the instruments used in assessing these variables. The chapter concluded with the procedures and instructions used in the conduct of the experiment.

CHAPTER III - THE FINDINGS

In presenting the results of the experiment, the statistical tests of the null hypotheses will first be considered. Appropriate tests will be made both of counselors' ratings of behavior variables and of predictions of persistence. The second section will present data to describe the interrlationships between the variables of the study, and in the final section the relation of the interview to certain objective tests will be outlined. The interpretation of the findings will be presented in the following chapter and discussion here will be limited to that necessary to the presentation of the results.

Tests of Statistical Hypotheses

Tests of Behavior Variables

Two of the questions posed in this experiment were concerned with (a) the counselor and (b) the content of the admissions interview as factors influencing the rating of behavior variables. Tests of hypotheses reported in this section were made to determine whether either of these factors had a significant effect on the ratings of the behavior variables, Achievement potential, need Achievement, need Dominance, need Integration, and press Security.

Because the design randomly assigned subjects to a counselor-interview treatment, a two-way analysis of variance was appropriate to give a simultaneous test of hypotheses concerning the effect of counselors, of interviews, and the interaction of these two factors.

This design is more fully described in Cochran and Cox (9, p 86-93). The present experiment was different in that more than one observation (subject) appears in an experimental unit making possible a test of the differences between both rows and columns (counselors and interviews) as well as the interaction. This part of the analysis is based on one hundred forty-seven cases, the first seven subjects assigned to the twenty-one treatment combinations.

The assumptions of normality of distribution and homogeneity of variances have been shown to be less important in the type of analysis used here than was once believed. Box and Anderson (7) have shown the "robustness" of analysis of variance tests when these assumptions are not met. Nevertheless, it was desirable to know whether the assumption of equality of variances was satisfied. Bartlett's test, as outlined by Johnson (15, p 83-4), was used to test the homogeneity of variances of the five variables. No significant differences were found, but the meaning of the results are not clear in the case of press Security. Because a zero variance occurred in one of the sub-groups, the normal computations were not possible. Completion of the test, however, using the remainder of the variances gave a probability value of approximately .06. Considering the zero variance subjectively, the overall result would probably show the variances to lack homogeneity at the 5% level of significance. Because this discrepancy is not great and in view of the work of Box, this single finding does not assume much importance in interpreting the results.

For these results, significance at the 1% level was interpreted as rejecting the null hypothesis. Significance at the 5% level was interpreted as tentative rejection of the hypothesis.

Analysis of need Dominance Ratings. Table 3.1 presents the results of the analysis of variance test of the following hypotheses.

TABLE 3.1

ANALYSIS OF VARIANCE OF n DOM RATINGS MADE BY SEVEN COUNSELORS USING ONE OF THREE STRUCTURED INTERVIEWS (N = 147)

SV	df	SS	MS	F
Between Counselors	6	28.2721	4.7120	4.527**
Between Interviews	2	6.8979	3.4490	3.314*
Counselor by Interview Interaction	12	9.4830	.7902	___
Error	126	131.1429	1.0408	
Total	146	175.7959		

** .01 level of significance
* .05 level of significance

Hypothesis: There are no differences among the mean ratings of need Dominance made by the seven counselors.

The results show that this hypothesis was tentatively rejected at the 5% level of significance. Interviews of different content elicit different mean ratings. The means were:

	Interview	Mean Rating
1.	Perceptions of self	2.61
2.	Percpetions of children	3.14
3.	Perceptions of teachers	2.88

Further tests of the differences between these means using the method developed by Duncan (13) shows that the difference occurs between the means of interviews one and two. The differences between other pairs were not significant.

Analysis of need Integration Ratings. Table 3.2 shows the results of the tests.

TABLE 3.2

ANALYSIS OF VARIANCE OF n INT RATINGS MADE BY SEVEN COUNSELORS USING ONE OF THREE STRUCTURED INTERVIEWS (N = 147)

SV	df	SS	MS	F
Between Counselors	6	10.0816	1.6803	1.992
Between Interviews	2	1.0748	.5374	___
Counselor by Interview Interaction	12	9.5918	.7993	___
Error	126	106.2858	.8435	
Total	146	127.0340		

Hypothesis: There are no differences among the mean ratings of need Integration made by the seven counselors.

This hypothesis was accepted. There were no differences.

Hypothesis: There are no differences among the mean ratings of need Integration made on the basis of interviews of different content.

Results show that there were no differences. The hypothesis was accepted.

Analysis of press Security Ratings. Results of the analysis of variance of this variable are given in Table 3.3.

TABLE 3.3

ANALYSIS OF VARIANCE OF p SEC RATINGS MADE BY SEVEN COUNSELORS USING ONE OF THREE STRUCTURED INTERVIEWS (N = 147)

SV	df	SS	MS	F
Between Counselors	6	2.5169	.4195	—
Between Interviews	2	1.1020	.5510	—
Counselor by Interview Interaction	12	8.7076	.7256	—
Error	126	117.7143	.9342	
Total	146	130.0408		

Hypothesis: There are no differences among the mean ratings of press Security made by the seven counselors.

The F test shows no differences among the mean ratings, so the hypothesis is accepted.

> Hypothesis: There are no differences among the mean ratings of press Security made on the basis of interviews of different content.

This hypothesis is accepted, for the test of significance shows no differences.

Analysis of Achievement potential Ratings. Table 3.4 gives the data from analysis of variance of these ratings.

TABLE 3.4

ANALYSIS OF VARIANCE OF ACH p RATINGS MADE BY SEVEN COUNSELORS USING ONE OF THREE STRUCTURED INTERVIEWS (N = 147)

SV	df	SS	MS	F
Between Counselors	6	7.6598	1.2766	1.429
Between Interviews	2	1.8095	.9048	1.013
Counselor by Interview Interaction	12	6.9524	.5794	___
Error	126	112.5715	.8934	
Total	146	128.9932		

> Hypothesis: There are no differences among the mean ratings of Achievement potential made by the seven counselors.

Because the F test did not reach the designated level of significance, the hypothesis is accepted.

> Hypothesis: There are no differences among the mean ratings of Achievement potential made on the basis of interviews of different content.

This hypothesis of no differences was also accepted.

Analysis of need Achievement Ratings. The results of the analysis of variance of these ratings is given in Table 3.5.

TABLE 3.5

ANALYSIS OF VARIANCE OF n ACH RATINGS MADE BY SEVEN COUNSELORS USING ONE OF THREE STRUCTURED INTERVIEWS (N = 147)

SV	dt	SS	MS	F
Between Counselors	6	3.1156	.5193	___
Between Interviews	2	3.4285	1.7142	2.348
Counselor by Interview Interaction	12	7.0477	.5873	___
Error	126	92.0000	.7302	
Total	146	105.5918		

> Hypothesis: There are no differences among the mean ratings of need Achievement made by the seven counselors.

This hypothesis is accepted. There were no significant differences.

> Hypothesis: There are no differences among the mean ratings of need Achievement made on the basis of interviews of different content.

Results of the test of significance do not reach the 5% level. The following table of the means does suggest, however, that the third interview mean was lower, if not significantly.

Interview	Mean Rating
1. Perceptions of self	3.54
2. Perceptions of children	3.59
3. Perceptions of teachers	3.19

Tests of Prediction Variables

The preceeding chapter has outlined the scaling and the quantifying of counselors' judgments of persistence, through teacher education and into teaching. In this section the statistical model will be specified and the appropriate null hypotheses tested. The primary interest is in testing the differences between the bases involved in making the predictions, i.e., test data only, interview data, and interview plus test data. The design of the study will enable the effect of other variables to be partially out to permit a more precise test of the hypothesis of main concern. The statistical model will specify the test to be made.

Statistical Model.[1] Translating the problem of testing hypotheses concerning predictions into terms of the analysis as developed by Collier (10) gives the following definitions: X (ijkl) is the prediction score (either one) of the i^{th} individual who was seen by the j^{th} counselor who used the k^{th} interview and the l^{th} basis was used for making one of two predictions so that

---

[1] To facilitate the preparation of the manuscript, English capital letters will replace the Greek letters which normally designate parameters.

$i = 1, 2, 3 \ldots 7$: identifies the individual
$j = 1, 2, 3 \ldots 7$: identifies the counselor
$k = 1$: : interview to assess self perceptions
$k = 2$: : interview to assess perceptions of children
$k = 3$: : interview to assess perceptions of teachers
$l = 1$: : test data only
$l = 2$: : interview data only
$l = 3$: : interview plus test scores

It is assumed that X (ijkl) are random variables, normally distributed with the following specifications:

$$E[X(ijkl)] = L(ijkl)$$

$$\text{Variance } [X(ijkl)] = S^2$$

$$\text{Covariance } [X(ijkl),\ X(i'j'k'l')]$$

$$= RS^2 \text{ for } i = i',\ j = j',\ k = k',\ l \neq l'$$

$$= 0 \text{ otherwise}$$

X (ijkl) is further defined as a linear function of fixed parameters which are representative of the various factors affecting a score. Thus

$$L(ijkl) = M + A(j) + A(k) + A(l) + B(jk) + B(jl) + B(kl)$$

$$+ G(jkl) + E(ijkl)$$

where M designates some general affect, A a main effect of a factor, B a first order interaction, and G a second order interaction, and E the error term.

In the specification of the model it is assumed that the basic variables, X (ijkl) are normally distributed and that the observations on different individuals are independent. The assumptions regarding the covariances in this experiment are as follows. Between predictions made on the same individual, $i = i'$, seen by the same counselor, $j = j'$, observed in the same interview, $k = k'$, made on a different basis, $l \neq l'$, a correlation of R is assumed to exist.

Tables 3.6 and 3.6A give the analysis of variance model for the design and the notations for the calculation of the desired sums of squares. The total sum of squares, designated by T, is divided into two orthogonal sets, each of which is further split orthogonally for the testing of the main effects and the several interactions.

Test of the Null Hypotheses. The previous section has shown how the analysis was divided orthogonally into sets, each set testing specified main effects and interactions. The pattern of this section will be to proceed from the top of the table (Table 3.6), presenting the results of each set in turn. The major hypothesis tested was the main effect in the first set. This procedure will be followed separately for testing the hypotheses when the variable is prediction of graduation from teacher education and entrance into teaching. Results showing differences at the 1% level of significance were interpreted as rejecting the null hypothesis. At the 5% level of significance tentative rejection of the hypothesis was made.

TABLE 3.6

ANALYSIS OF VARIANCE MODEL FOR A THREE DIMENSION DESIGN WITH LEVELS OF ONE DIMENSION CORRELATED

SV	df	SS
Set 1		
A (l)	L - 1	C - Z
B (jl)	(J - 1)(L - 1)	E - A - C + Z
B (kl)	(K - 1)(L - 1)	F - B - C + Z
G (jkl)	(J - 1)(K -1)(L - 1)	G + A + B + C - D - E - F + Z
Error (Set 1)	(I - 1) JK (L - 1)	T + D - G - H
Total (Set 1)	IJK (1 - 1)	T - H
Set 2		
M	1	Z
A (j)	J - 1	A - Z
A (k)	K - 1	B - Z
B (jk)	(J - 1)(K - 1)	D - A - B + Z
Error (Set 2)	(I - 1) JK	H - D
Total (Set 2)	IJK	H

TABLE 3.6A

COMPUTATION FORMULAS FOR SUMS OF SQUARES FOR ANALYSIS OF VARIANCE MODEL IN TABLE 3.6

$$X^2(\ldots.) \;/\; IJKL = Z$$

$$\sum_{j} X^2(.j..) \;/\; Ikl = A$$

$$\sum_{k} X^2(..k.) \;/\; IJL = B$$

$$\sum_{l} X^2(...l) \;/\; IJK = C$$

$$\sum_{jk} X^2(.jk.) \;/\; IL = D$$

$$\sum_{jl} X^2(.j.l) \;/\; IK = E$$

$$\sum_{kl} X^2(..kl) \;/\; IJ = F$$

$$\sum_{jkl} X^2(.jkl) \;/\; I = G$$

$$\sum_{ijk} X^2(ijk.) \;/\; L = H$$

$$\sum_{ijkl} X^2(ijkl) \;/ \; = T$$

Table 3.7 presents the results of the analysis of variance computations for testing hypotheses relating to counselors' predictions of persistence through graduation from the teacher education program.

> Hypothesis A(1): There are no differences among the mean predictions of persistence through teacher education whether made from test data only, interview only, or interview plus test data.

Results show that this hypothesis was accepted; there were no significant differences. Interactions shown in the first set were also not significant.

> Hypothesis A (j): There are no differences among the mean predictions of persistence through teacher education made by different counselors.

This hypothesis was rejected at the .1% level of significance. Some counselors make judgments of persistence which have higher mean values than those made by other counselors. The following are the mean values for the seven counselors.

Counselor	Mean Judgment
1	5.3
2	4.5
3	4.7
4	5.1
5	5.7
6	4.5
7	5.5

> Hypothesis A (k): There are no differences among the mean predictions of persistence through teacher education when subjects were given different structured interviews.

The test of this hypothesis showed no significant differences. The hypothesis was accepted.

TABLE 3.7

ANALYSIS OF VARIANCE OF COUNSELORS' PREDICTIONS OF GRADUATION FROM DIFFERENT BASES

sv	dt	SS	Ms	F
Set 1				
A (l) (bases)	2	1.75964	.87982	1.34
B (jl)	12	7.35147	.61262	----
B (kl)	4	2.71656	.67914	1.03
G (jkl)	24	13.02948	.54290	----
Error (Set 1)	252	165.80952	.65797	
Total (Set 1)	294	190.66667		
Set 2				
M	1	11195.65533		
A (j) (Counselors)	6	83.90023	13.98337	8.68***
A (k) (Interviews)	2	5.25623	2.62812	1.63
B (jk)	12	17.47392	1.45616	----
Error (Set 2)	126	203.04762	1.61149	
Total (Set 2)	147	11505.33333		

***Significant at .001 level

Table 3.8 presents the results of the analysis of variance computations for the testing of hypotheses relating to counselors' predictions of persistence into teaching.

> Hypothesis A (1): There were no differences among the mean predictions of persistence into teaching whether made from test data only, from interview data only or from interview and test data.

Results of the test of this hypothesis shows that the means are different at the 5% level of significance, thus tentatively rejecting the hypothesis. The mean prediction scores made from the different bases are:

Bases	Scores
Test data only	4.5
Interview only	4.8
Interview plus test data	4.8

It can readily be seen that the difference occurs between test data only and the other two bases.

> Hypothesis A (j): There are no differences among the mean predictions of persistence into teaching made by different counselors.

Differences among the counselors' predictions were sufficient to reject the hypothesis at the .1% level of significance. The following are the means of the several counselors.

Counselor	Mean Judgment
1	4.9
2	4.0
3	3.6
4	4.7
5	5.6
6	4.6
7	5.2

TABLE 3.8

ANALYSIS OF VARIANCE OF COUNSELORS' PREDICTIONS OF ENTRANCE INTO TEACHING FROM DIFFERENT BASES

SV	dt	SS	MS	F
Set 1				
A (l) (bases)	2	8.00000	4.00000	4.52*
B (jl)	12	13.42857	1.11905	1.26
B (kl)	4	3.21089	.80272	----
G (jkl)	24	17.07483	.71145	----
Error (Set 1)	252	222.95238	.88473	
Total (Set 1)	294	264.66667		
Set 2				
M	1	9604.00000		
A (j) (counselors)	6	167.42857	27.90476	13.96***
A (k) (interviews)	2	9.80952	4.90476	2.45
B (jk)	12	16.19048	1.34921	----
Error (Set 2)	126	251.90476	1.99924	
Total (Set 2)	147	16049.33333		

* Significant at .05 level
***Significant at .001 level

> Hypothesis A (k): There are no differences among the mean predictions of persistence into teaching when subjects were given different structured interviews.

This hypothesis was accepted. The test showed no significant differences.

Interrelations Among Behavior Variables

The description of the five behavior variables was presented in the first chapter, and this section will present their statistical relationships. Each subject was rated on each of the five variables, at three different times. The first rating was made following the structured interview; the second combined the interview and test data; and the third was made after an interval of four weeks on the basis of test data only.

Table 3.9 presents the means and standard deviations of the five behavior variables calculated from ratings made on each of the bases.

Table 3.10 reports the product moment correlation coefficients between ratings of the same variable made on different bases. The correlation coefficients between different variables made on the same basis are shown in Table 3.11.

Since the assumptions of normality and homoscedasticity did not appear to be justified, the designations of significance that appear in the above tables are not the results of the usual t test for the significance of a correlation coefficient. Instead chi square

TABLE 3.9

MEANS AND STANDARD DEVIATIONS OF COUNSELOR RATINGS OF BEHAVIOR VARIABLES USING THREE DIFFERENT BASES

	Behavior Variables									
	n Dom		n Int		p Sec		Ach p		n Ach	
Bases	X	sd	X	sd	X	sd	X	sd	X	sd
Test results only	3.09	1.02	2.83	.93	3.22	.71	2.78	1.19	3.26	.98
Interview only	2.81*	1.09	3.23	.92	3.20	.94	2.98	.92	3.20	.83
Interview and Tests	2.94	.96	3.05	.90	3.17	.86	2.98	1.15	3.23	.94

TABLE 3.10

INTERCORRELATIONS OF COUNSELOR RATINGS OF THE SAME PERSONALITY VARIABLE USING THREE DIFFERENT BASES: 1) TEST RESULTS ONLY, 2) STRUCTURED INTERVIEW ONLY, 3) INTERVIEW PLUS TEST RESULTS

r Between Bases	n Dom	n Int	p Sec	Ach p	n Ach
r (1, 2)	.14	.22**	.11	.35**	.09
r (1, 3)	.26**	.36**	.06	.82**	.51**
r (2, 3)	.77**	.68**	.72**	.41**	.49**

* Significant at 5% level
** Significant at 1% level

TABLE 3.11

INTERCORRELATIONS OF COUNSELOR RATINGS OF DIFFERENT PERSONALITY VARIABLES MADE ON THREE BASES

Bases	Variables	Behavior Variables n Int	 p Sec	 Ach p	 n Ach
Basis 1:	n Dom	-.50**	.01	-.13	.07
Tests	n Int		.02	.22*	.11
Results	p Sec			-.03	.19
Only	Ach p				-.20*
Basis 2:	n Dom	-.28**	.14	.03	.16*
Inter-	n Int		-.29**	.34**	.28**
view	p Sec			-.23*	.06
Only	Ach p				.31**
Basis 3:	n Dom	-.29**	.12	.07	.07
Test Re-	n Int		-.24*	.00	.18
sults Plus	p Sec			-.11	.12
Interview	Ach p				-.09

* Significant at 5% level

** Significant at 1% level

tests were made on the contingency tables that were formed from the combined scales of each pair of variables. This chi square criterion was used to test the hypothesis that the observed set of ratings could have been drawn at random from a population in which the ratings are independent. This is equivalent to testing the hypothesis that the observed correlation between a pair of ratings could have been drawn from a population in which the correlation is zero.

In the contingency tables formed from the ratings of pairs of variables, many of the peripheral cells contained such low observed frequencies that they had to be pooled with adjacent cells. This pooling was carried out according to the recommendations of Cochran (8). Correlation coefficient from .14 to .28 were tested by the chi square method. The results were: .14, .14, .16*, .18, .19, -.20*, .22*, -.23*, .24*, .26**, .28**, .28**, .28**. Coefficients smaller than .14 were declared non-significant, and coefficients larger than .28 were declared significant at the 1% level without further tests.

Relation of Interviews to Certain Tests

Chapter I has presented the rationale underlying the three structured interviews which were constructed to assess perceptions of self, of children, and of teachers. These structured interviews were used as one means of obtaining information from which ratings of the five "persistence" variables were made. It is the purpose of this section to determine the relationship between the content of each interview and some outside estimates of the qualities which they were to measure. After a general discussion of the technique to be used, the specific procedures used with each interview will be presented.

To establish a relationship between two independent estimates of the same quality is an accepted procedure for determining the concurrent validity of the estimates (1). This method permits a judgment of the extent to which the two estimates agree, i.e., the extent to which they measure the same quality. It must be remembered that there is not a concurrent validity, for more than one is possible. The appropriateness of statements of concurrent validity depend on the measure of concurrent performance of status which is employed and the size of the relationship is determined by the relevance and the reliability of the criterion. Because of the number of approaches that could be taken, the relationships computed in this study represent one of the possible comparisons that could be made in establishing a concurrent validity of each of the interviews.

The first step in this procedure was to specify in detail the quality to be assessed from each interview. Since the first interview was constructed to assess certain aspects of self concept, it was reasoned that questions from this interview should give evidence of personal insecurity. In the second and third interviews the qualities were a professional attitude toward children, and a professional attitude toward teaching closely following the focus of the interview questions. A set of descriptive statements was developed describing each quality.

The measurement of the qualities outlined was accomplished by obtaining judgments of the subjects' responses to the interview questions. The interview protocol, the counselors' written record of subjects' responses to interview questions provided the basic data. Counselors were instructed before the experiment so that they recorded the essence of subjects' responses, particularly the affect shown. No attempt was made to keep verbatim records. After becoming familiar with the statements which described the quality being measured, a judge scored each of the written responses according to the following instructions:

> "You are being asked to rate counselors' recordings of student responses to questions from three structured interviews. Attached to these general directions are three sheets describing the criteria against which judgments of responses from each interview are to be made.
>
> Ratings should be made as follows:
>
> Score 0 When the questions if not answered
>
> Score 1 There appears to be no relationship between the response and any of the criteria for judging that interview.
>
> Score 2 There is some relationship between the response and any one of the criteria for that interview.

Score 3 There appears to be a close relationship between the response and one or more of the criteria for that interview."

Following each set of criterion statements were specific examples of responses which had been scored according to the scheme described that served as a key for the judge.

To maximize the reliability of a single score in the internal consistency sense, the technique of reciprocal averages was employed. This technique involved the determination of weights for each item-response which would yield the most reliable overall score. This technique, its methods and assumptions have been presented by Mosier (19) and Mitzel and Hoyt (18). This project employed the Univac Scientific (ERA 1103) in the computation of the weighted scores for each individual. From these scores for each individual by each judge the inter-observer reliabilities were computed. Total scores for individuals from the interview weighting and from the concurrent criterion were used to obtain the concurrent reliability coefficients.

The details of the application of this procedure to each interview follow.

Perceptions of Self

The purpose of Interview I was to attain an estimate of the self-concept of the student. As has been pointed out in Chapter I, the idea of the self-concept occupies a central position in the personality theory of Carl Rogers, and states, essentially, that the individual responds to his environment in relation to the concept he possesses of himself.

The basic concept in the evaluation of the interviews of this group was that of insecurity. The series of hypotheses that were established suggested how an "insecure" teacher or student would react in his environment. From these hypotheses specific statements were made to apply to the questions asked by the interviewers. A set of eighteen such statements or hypotheses was finally agreed upon, and ratings were made of the interview data of each student using these statements as the guide.

An insecure teacher (or prospective teacher) would:

1. Be hesitant in relations with children's parents.
2. Exhibit concern about ability to discipline.
3. Be unsure of her place in education (major, goals, etc.)
4. Fear adjusting to individual children (be afraid she can't do this).
5. Be entering teaching because the job looks secure.
6. Enter teaching (or attend college) to gain prestige.
7. Be uncertain as to graduation.
8. Base responses on social pressures, or be sensitive to these pressures.
9. Stick to beliefs and ideas regardless.
10. Lack self-confidence.
11. Finds feelings easily hurt.
12. Seldom leads in a group.
13. Exhibit concern about getting along with children.
14. Show inconsistencies in responses to children.
15. Tend to be more rigid.
16. Tend to disparage own abilities and be self-deprecatory.
17. Be sensitive to criticism.
18. Strive for high achievement.

These characteristics were those given to the judges as the basis for their scaling of counselors' written reaction to subjects' responses. One example of the key given to judges for scoring responses in Interview I follows. The scaling method has been described above.

Interview Question: What are some of the problems you have in getting along with others?

Score 1 Responses such as:

1) I don't think I have any particular problem. I enjoy being with people.

2) Sometimes I am too outspoken.

Score 2 Responses such as:

1) I want things my own way.

Score 3 Responses such as:

1) I think I am too shy and self-conscious.

2) My feelings are easily hurt.

Ratings on Interview I were completed by three judges; two were advanced doctoral students and one was a member of the college staff. A total score was obtained for each subject from each judge's ratings by the reciprocal averages method described above. The intercorrelations between the judges' ratings show agreement which is sufficiently high for this type of scaling. The results are presented below. It can be seen that the ratings made by judge two tended to be different from others. The fact that judge two made more homogeneous ratings, as indicated by the variance of his judgments, would seem to account for much of the difference.

Inter-Judge Correlations

	Judge	
	1	2
Judge 2	.75	
3	.94	.79

Early in the research planning it was decided that the outside measure of insecurity with which interview results would be compared would be derived from the *Minnesota Multiphasic Personality Inventory* (MMPI). The MMPI has, in recent years, gained acceptance as one of the most valid and reliable instruments in personality measurement. All student in the sample, except one, had taken this test as a normal part of the sophomore clearance procedures.

Since there was no specific "Insecurity" scale on the MMPI, a search of literature was necessary in order to determine which scales had been found to correlate in some way with what had been hypothesized to be an insecure teacher. Gough (14) has written concerning security-insecurity as reflected on the MMPI, basing his article on Maslow's original security-insecurity scale (16). It was felt, however, that Gough's norm group (high school students) were not sufficiently like College of Education sophomores to use his results directly in our study. Further, since this study was concerned with the idea of self-concept, there was more concern for "what does an individual with a certain elevated scale think of *himself*."

Accordingly, it was decided to use Black's adjective check list (5), which is based on Hathaway and Meehl's list. Black used this check list on over 200 Stanford University women students, using both self-ratings and "other" ratings, and related these to high points on the MMPI scales. Only self-ratings were selected in this study, and only those which were significant at the 5% level of significance or better were used. The writers are fully cognizant of the problems involved when individual MMPI profiles are investigated. However, in lieu of a more satisfactory method of obtaining results of an objective nature, and finding it necessary to operate within some limits, it was decided to work with adjective lists from individual scales, but devise a means of rating where several scales would be taken into account

A review of hypothetical characteristics elicited the following possible adjectives:

1. Hesitant
2. Lacking confidence
3. Uncertain
4. Sensitive
5. Rigid
6. Self-deprecatory
7. Follower
8. Seeking prestige

Black's adjective check list of self-ratings indicated eight clinical scales (and combinations thereof) containing adjectives which were appropriate for our study. These scales, coded according to Hathaway's method (22, Chap. 12) were 1-3, 2, 3, 3-4, 4, 5, 6, and 7. All scales were high except 5, which was low. Following is a list of adjectives assigned to a specific scale or scales:

1. High 1-3: indecisive
2. High 2: shy, indecisive, dissatisfied, self-distrusting
3. High 3: shy (not checked)
4. High 3-4: sensitive (not checked)
5. High 4: adaptable (not checked)
6. Low 5: distrusting, dissatisfied, sensitive, shy
7. High 6: shy
8. High 7: shy, sensitive, indecisive

It should be noted here that the writers are not stating that it is considered a positive characteristic of a good teacher to have, say, a high 3-4 combination. They are, in this instance, simply attempting to measure presence or absence of traits it is felt are indicative of feelings of insecurity.

From Black's list, the following system was established for evaluation of the individual MMPI profiles (all scores are T-score values):

1. For scales 2, 6, and 7:
   1 point for each scale 60-69
   2 points for each scale 70 and above

2. For scale 5:
   1 point for 31-40
   2 points for 30 and below

3. For Scale 1-3 combination:
   2 points if both are 60-69
   3 points if both are 70 and above

4. For scale 3:
   Subtract one point for 60-69
   Subtract 2 points if 70 and above

5. For scales 3-4 in combination:
   Subtract 2 points if both are 60-69
   Subtract 3 points if both are 70 and above

6. For scale 4:
   Subtract 1 point if 60-69
   Subtract 2 points if 70 or above

MMPI's were scored using the above key, and the individual scores were correlated with the mean score of the three judgments of Interview I. The correlation between these two measures of security for the fifty-five subjects was -.04. This relationship is not beyond chance expectations. It must therefore be concluded that there is no relationship between the interview measure and the MMPI measure of insecurity.

Perceptions of Children

Subjects who were randomly assigned to Interview II were asked questions to assess their perceptions of children. To score the extent of their favorable attitudes toward children, judges used the general scaling procedure previously described and used the following set of statements to specify these favorable attitudes.

Teacher who have favorable attitudes toward children would:

1. Recognize individual differences.
2. Realize children are different in reactions to school.
3. Recognize teacher attitudes make differences in pupil reactions.
4. Give pupils a sense of accomplishment.
5. Understand pupils should gain social as well as academic achievement in school.
6. Give pupils credit for trying.
7. Not push pupils to achieve, but will make work interesting so they will want to achieve.
8. Base values on own background plus community standards.

9. Permit children considerable freedom to develop socially as well as intellectually.
10. Emphasize reasons for obeying, and not expect a blind obedience.
11. Admit to pupils when they are wrong.
12. Realize physical outlets are needed for energy.
13. Accept the child who fabricates excessively, seeking causes for the behavior if she feels it is warranted.
14. Accept the fact pupil-teacher disputes are often the fault of the teacher.
15. Realize the respect of the teacher by the pupils must be earned.

To further aid the scaling process the following example was used to illustrate the assignment of scale values to item responses.

Interview Question: How do you think children react to teachers who emphasize doing well in school?

Score 1 Responses such as:

1. There isn't much reaction - they kind of expect it.

2. They will resent it.

Score 2 Response such as:

1. They will resent it unless they know why she is emphasizing doing well.

Score 3 Responses such as:

1. It depends on the pupils. Some of them will get frightened, others will be motivated to do better.

2. It depends on the home and/or social class of the pupil.

Two judges, advanced doctoral students, rated the interview, and the reciprocal average technique was used to obtain a total score for each subject which was based on the optimum weighting of each item. The product moment correlation between the judges' ratings was .87 showing that the two judges' ratings placed the subjects in nearly the same order on the quality under study.

The most appropriate standardized instrument for use as an outside concurrent criterion with which interview scores could be compared was the Minnesota Teacher Attitude Inventory (MTAI). The purpose of this test is to measure "those attitudes of a teacher which predict how well he will get along with pupils in interpersonal relationships" (11, p 3). All students who were administered Interview II had taken the MTAI as a part of the sophomore clearance battery. The product moment correlation between the mean of the two ratings on Interview II and MTAI scores for the fifty-six subjects was -.04. This correlation was no larger than could have been expected by chance, so it must be concluded that there is no evidence that these two scores were measures of the same quality.

Perceptions of Teachers

Interview III was designed to assess the subjects' perceptions of teachers. The following descriptive statements were used as the bases for employing the general scaling procedure in scoring the extent of the favorable attitude toward teachers.

Teachers with "professional attitudes" would feel:

1. Four years college plus practical work with children is necessary training.

2. Methods and/or student teaching are necessary in addition to a liberal arts education for teaching.

3. They must maintain some basic achievement standard in their professional training, but would not emphasize grades. Rather, they would look on them as guides.

4. It is good to belong to a professional organization to share opinions and to grow professionally.

5. All members should want to belong.

6. They should further their professional status by additional education, professional reading, and professional journals.

7. It is important to improve and grow professionally.

8. Most teachers, like themselves, work hard in their field, but recognize that all do not.

9. Other things, such as personality, are important besides high intelligence to success and persistence in teaching.

10. Humanitarian motives are most important in choosing teaching as a field.

11. Proud enough of their profession to be recognized as a teacher, regardless of sex.

12. Realistic enough to expect some discipline problems, but will not blame all these problems on the children.

13. Realize that teacher attitudes and home background are important contributing factors to pupils' reactions and attitudes.

14. The necessity for individual handling of problems, yet handling these problems in a firm and consistent manner.

15. Teachers must maintain satisfactory standards of behavior as should any professional person, but not the unrealistically high standards that do not permit an understanding of pupil problems.

16. Humanitarian motives are most important in life to them.

17. Financial rewards from teaching are not the most important reasons they entered teaching.

18. There are both professional and personal advancements in education.

19. Teaching provides them an opportunity to work with children where they can see them learn and develop.

20. Definite attitudes and opinions toward professional problems, and would possess information concerning the profession.

Further definition was given to the scaling procedure by the following example.

Interview Question: What things in life do teachers value most or believe are most important?

Score 1 Responses such as
  1. It's hard to generalize.
  2. A good education.
  3. Security.

Score 2 Responses such as
  1. Family and home.
  2. Getting along with others.

Score 3 Responses such as
  1. Helping others.

The same two judges who rated the previous interview rated Interview III. The reciprocal averages technique was employed to obtain a total score for each subject based on the optimum weighting of each item. The product moment correlation between the judges' ratings was .92 showing high agreement between the judges.

In the discussion of the instruments used in this study, Bower's Teacher Opinion Inventory was described. This inventory seemed to be the one most appropriate to serve a criterion for determining a concurrent validity. Subjects were notified that they were to complete the Bower's Inventory at a designated time and place after the interview had been completed. All but two of those students who had received Interview III were tested. The product moment correlation coefficient between judges ratings of Interview III and the Teacher Opinion Inventory score for the fifty-two subjects was -.01. It must be stated that there is no evidence of concurrent validity between these two measures, for this coefficient was no larger than could have been expected by chance.

Summary

Chapter III has presented the results of the analyses of the data. Statistical hypotheses were tested and the results were reported in the first section. The statistical interrelations of the variables were presented, as were the tests of concurrent validity. Discussion of these results are presented in the following chapter.

CHAPTER IV

THE DISCUSSION AND INTERPRETATIONS

Chapter III has presented the results of the statistical analyses without comment or interpretation. It is the purpose of this chapter to present a discussion of these results. Because a summary of the study is found at the beginning of this report, a review of the design and procedures will not be included in this chapter.

Discussion of the Findings

The Variables

The statements of the propositions specified five behavior variables which were estimated by counselor judgments made on the different bases described above. Chapter II discussed the relationship that was expected between these behavior variables as they were defined. Need Dominance and need Integration were assumed to have a moderate negative relationship, but no assumptions were made concerning the other variables.

Table 3.9 presents the means and standard deviations of the ratings of each behavior variable made on each basis. These data show that counselors tended to use the range of the scales fairly well, for the means of the scales were near the midpoint of the five point scale with a standard deviation of about one point. No statistical test of the differences between the means and standard deviations was made, for they appear to be of no practical importance.

Consideration of the coefficients in table 3.10 suggests that the interview was the main basis for estimating need Dominance, need Integration, and press Security. This is indicated by the relatively high r (2, 3) as compared with r (1, 3) on each of these three variables. That is, the set of ratings based on test results and the interview jointly correlates more highly with the set of ratings based on the interview alone than with the set of ratings based on test results alone, so that the interview seems to have been weighted more heavily than the test results where both were used jointly. This is in keeping with the expectation that counselors would depend more heavily on impressions gained from an interview than on test results in rating personality type variables.

On the variable Achievement potential, consideration of the coefficients reported in table 3.10 suggests the following interpretation. It seems probable that the test results and the interview were used by the counselors to estimate separately the two components of achievement potential as defined in chapter II. This interpretation is suggested by the large difference between r (1, 3) and r (2, 3) in view of the further consideration that the natures of the bases are such that the test results provided more acceptable basis for estimating scholastic ability than the second component, while the interview provided a better basis for estimating energy, enthusiasm, and alertness than scholastic ability.

The relation of need Achievement ratings made on different bases presents a still different picture. It appears that tests and the interview give estimates of two different variables (qualities) which are not related to each other, r (1, 2) = .09. Each variable is equally important in its contribution to the rating made on the basis of interview and test results jointly. It seems probable that the first of these estimates is derived.

from the discrepancy between scholastic ability (A.C.E., Miller Analogies and other test scores) and achievement (high school rank, honor point ratio) as evidenced in the test data and is closely related to scholastic achievement. The other estimate which stems from the interview may be more general and less academic or scholastic as suggested in the definition in Chapter II. Need Achievement then appears to be a composite estimate of two equally weighted components.

The correlation coefficients reported in table 3.11 are all low (the highest is -.50 and the second highest is .34), although a few are statistically significant. Among the highest of these are the three correlation coefficients between need Dominance and need Integration, -.50 on the basis of test results only, -.28 on the basis of the interview only, and -.29 on the basis of both sources of information jointly. The closer agreement of the coefficient based on joint sources of information with that based on interview only than with that based on test results only tends to confirm the interpretation offered above that the counselors depended mainly on the interview in judging these variables. The other two coefficients should therefore be considered preferable to that based on test results only as an estimate of the true degree of relationship between these two variables. The negative character of the coefficients accords with the assumption stated in Chapter II that a moderately high negative correlation exists between these two variables, although the obtained coefficients are somewhat lower than might have been expected.

In comparing the three coefficients between need Integration and press Security (table 3.11), the closer agreement between the coefficient based on test results and the interview jointly with the coefficient based on the interview only than with the coefficient based on test results only supports the interpretation made earlier that the interview is the main basis for counselors' judgments of these variables.

It will be recalled that there are two components of achievement potential, scholastic ability, which will now be called the scholastic component, and such factors as energy, enthusiasm, and alertness, which will now be called the non-scholastic component.

Reference is now made to table 3.10 for the purpose of interpretation. Of the three correlation coefficients between need Integration and Achievement potential, the coefficient, r = .22, between judgments based on test results only refers to the judgments of need Integration in which the counselors apparently felt relatively little confidence and the judgments of the scholastic component of Achievement potential in which the counselors apparently felt relatively much confidence.

The coefficient, r = .34, between judgments based on an interview only refers to the judgments of need Integration in which the counselors probably felt relatively much confidence and the judgments of the non-scholastic component of Achievement potential in which the counselors probably felt relatively little confidence, or perhaps felt to be a relatively unimportant component of Achievement potential. The coefficient, r = .00, between judgments based on test results and an interview jointly probably refers to judgments of need Integration based mainly on the interview and to judgments mainly of the scholastic component of Achievement potential based on test results. Therefore this coefficient probably bears no special mathematical relationship to the other two.

In comparing the three coefficients between need Integration and need Achievement, it should be borne in mind that need Achievement appears to be made up of a scholastic component estimated from test results and a non-scholastic component estimated from the interview. The counselors apparently gave equal weight to both components in estimating this variable on the joint basis. In estimating need Integration, however, they apparently weighted the interview more heavily than test results. All this was suggested earlier in considering the coefficients of table 3.10. In table 3.11, therefore, the coefficient, r = .11, between need Integration and need Achievement on the basis of test results only represents the coefficient between need Integration as estimated from the lightly weighted basis and the scholastic component of need Achievement. The coefficient, r = .28, between these two variables on the basis of the interview only represents the coefficient between need Integration estimated from the heavily weighted basis and the non-scholastic component of need Achievement. The coefficient, r = .18, estimated from the joint basis probably represents an averaging effect between need Integration estimated mainly from the interview and need Achievement as an average of its two components.

In considering the coefficients between press Security and Achievement potential the coefficient, r = .03, between the estimates based on test results only represents the coefficient between the lightly weighted estimate of press Security and the scholastic component of Achievement potential. The coefficient, r = .23, between the estimates based on the interview only represents the coefficient between the heavily weighted estimate of press Security and the non-scholastic component of Achievement potential. The coefficient, r = .11, between the jointly based estimates represents an averaging effect between press Security estimated mainly from the interview and a composite estimate of Achievement potential in which the scholastic component estimated from test results is weighted more heavily than the non-scholastic component estimated from the interview.

As for the variables press Security and need Achievement, the coefficient, r = .19, between the estimates based on test results only represents the coefficient between the lightly weighted estimate of press Security and the scholastic component of need Achievement. The coefficient of r = .06 between the estimates based on interview only represents the relationship, or lack of relationship, between the heavily weighted estimate of press Security and the non-scholastic component of need Achievement. The coefficient, r = .12, between the jointly based estimates represents an averaging effect between the estimate of press Security based mainly on the interview and a composite estimate of need Achievement in which its two components are about equally weighted.

In comparing the coefficients between the variables Achievement potential and need Achievement it should be recalled that each of these variables appears to be made up of two components. The coefficient, r = .20, between the estimates based on test results only represents the coefficient between the scholastic components of these two variables. The coefficient, r = .31, between the estimates based on the interview only represents the coefficient between the non-scholastic components of these two variables. The coefficient, $r = .09$, between the jointly based estimates represents an averaging effect between composite estimates of the two variables, in which the scholastic component is more heavily weighted than the non-scholastic component in the estimate of Achievement potential while the two components are about equally weighted in the estimate of need Achievement.

The complexity of the relationships and the difficulty of interpretation of the results suggests that in future work it may be preferable to treat the components of Achievement potential and need Achievement as separate variables.

Ratings of Behavior Variables

Two of the questions asked in this study concerned the effect of interview content and of the counselor himself on the ratings of behavioral variables. A two-way analysis of variance (tables 3.1, 3.2, 3.3, 3.4, 3.5) of each behavior variable showed that only need Dominance ratings were affected by interviews and counselors. Table 3.1 shows that there were differences among the mean ratings of this variable by the counselors. Four of the counselors had mean ratings that were essentially the same. One tended to rate low and two, high. This difference may have resulted from a lack of definition of the variable or it may be that need Dominance, as it was defined, cannot reliably be estimated from the interview.

Differences among the interviews were found to affect only the ratings of need Dominance at the five per cent level of significance. Duncan's test showed that differences between the interview assessing perceptions of self and the one assessing perceptions of children accounted for the differences in these ratings. It seems reasonable that questions concerning the subject's perceptions of children would elicit higher ratings of need Dominance than those asking for perceptions of self.

In general one may conclude that the counselors were reliable in their ratings of all behavior variables except need Dominance, and that the ratings of these variables were not affected by the content of the interview.

Predictions of Persistence

The third general question of the study concerned the contribution of the interview to predictions of persistence in teacher education and into teaching. Related to this general question are two others. Are predictions affected by the fact that they are made by different counselors? Are the predictions affected by the differences in the content of the three interviews?

The analysis of variance of predictions of graduation from the teacher education program, Table 3.7, reveals that the mean predictions are not different when different bases for predicting are used. The interview as a basis for prediction does not elicit different mean predictions of graduation than do test data or interviews plus test data. However, the analysis of variance of predictions of entrance into teaching (table 3.8) shows that the interview is possibly effecting a modification of the judgments made from test data since the means of the three bases are different at the five per cent level of significance.

A possible explanation for the fact that the interview seems to function in one prediction but not in the other may be revealed by an examination of the correlation coefficients in table 3.10. As noted in the discussion of the variables, the interview was the main basis for estimating need Dominance, need Integration and press Security. Test data and the record of academic achievement figure more strongly in the judgments of Achievement potential and need Achievement.

One may reasonably advance the idea that counselor predictions of persistence in college will be conditioned largely by the academic needs and abilities of students, and that since the interview information makes little contribution to the establishment of these qualities, it does not affect the predictions that are made. Similarly, one may argue that one's seeking employment in teaching may be affected by the variables need Dominance, need Integration and press Security and that since judgments about these are based largely on the interview, the interview is an important factor in predictions.

The analysis of variance design enables one to examine the influence of variations in predictions that may be due to counselor differences and that may be attributed to the interview content differences. Tables 3.7 and 3.8 show that differences among counselors do occur in both mean predictions of persistence in teacher education and those about entrance into teaching. Neither prediction is affected by the content of the interview. This may reflect a difference among counselors in their experience. It may also reflect personal differences in their willingness to take risks in their predictions. Some of the differences may come about because less attention was given to training counselors in making predictions than was given to structuring the interview and defining the five variables.

Limitations

Limits placed upon the study by its scope or by its design leave questions unanswered. Some of these are being examined in a second study that has begun. Others may lead to continuing research in other places.

The design of the present study permitted an estimate of only one aspect of the reliability problem, inter-counselor agreements based on judgments of subjects randomly assigned. It would be helpful to know if the counselor's judgments would be consistent over a short time interval if the interview were held constant by a tape recording. The lack of significant differences among counselors, except on the one variable, however, attests to a reliability sufficient to justify a study of the validity of the interview.

Further study of each interview would be of interest. Are the three interviews only superficially dissimilar? Since four of the five variables are judged equally well from any of the three interviews, are they in some way homogeneous? What is the internal consistency of each interview? Could the portions of each interview that contribute most to counselor judgments be identified? If so, should a composit interview be made up of from the best of each?

In view of the fact that the interviews seem to work equally well in four of the five instances, one could question the basis upon which the counselor makes his judgment. Are ratings of the variables based upon the content of students' verbal responses or are they based upon the counselors' observations of affect? Further study in this area might well lead to a better understanding of how counselors arrive at their predictions.

Finally, this study has not attempted to establish the validity of the counselor judgments A second project growing out of the one reported here is looking into the relationships between the personality variables as judged by the counselor at the time of admission and as observed when the students who were interviewed become student teachers.

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Appendix A

Questions from Interview I
Questions from Interview II
Questions from Interview III
Rating Sheet
Data Sheet

Questions from Interview I

By now you are probably aware that the College of Education considers entrance into the junior year a pretty important step. You will begin your professional courses in education next year. In preparation for next fall you have been asked to take tests and have interviews and to look at the progress that you have made in the past two years. The main reason for this is to stimulate you to do some thinking about yourself and the profession for which you are preparing.

This interview today is a part of the process of helping you in thinking about yourself as a teacher. I have a group of questions that are aimed at this purpose. There are no right or wrong answers to the questions and students will probably have lots of different ideas about them. We just want your opinions.

A.

1. a. How have things been going for you since you started college?
   b. What have been your major concerns since starting college?

2. a. Why is a college education important for you?
   b. Why do you suppose you have come to feel this way?

3. a. How do you feel about your achievement in college?
   b. How important are grades, anyway?

4. a. How do you feel about your ability to do college work compared to other college students?
   b. What experiences have led you to feel this way, do you think?

5. a. How certain are you that you will graduate from the College of Education?
   b. What factors do you think might cause your prediction to be wrong?

B.

1. a. What are the basic principles or rules that you use as guides for your actions or behavior?
   b. Is it more important for a person to stick with his beliefs no matter what others may think or to compromise some of his beliefs for the sake of getting along well with others?

2. a. What are some of the problems you have in getting along with others?
   b. When you are with others or in a group, how often do you provide leadership for discussion or activities or influence others' decisions?

3. a. How well do you think you will get along with pupils in school?
   b. What do you think your major problems will be with pupils?

4. a. As a prospective teacher what do you feel are your strongest points?
   b. What are your weakest ones?

C.

1. a. What things in life do you value most, or feel are most important?

   b. How important is it to you to be well though of by your friends and acquaintances?

2. a. In choosing a career, which is more important to you, the security the job provides or the opportunities it presents?
   b. Tell me more about what you mean?

3. a. Why do you think you have decided to be a teacher?
   b. Can you explain a little more about your reasons?

4. a. How certain are you that you will teach after graduation?
   b. What might cause you to change your mind?

Questions from Interview II

By now you are probably aware that the College of Education considers entrance into the junior year a pretty important step. You will begin your professional courses in education next year. In preparation for next fall you have been asked to take tests and have interviews and to look at the progress that you have made in the past two years. The main reason for this is to stimulate you to do some thinking about yourself and the profession for which you are preparing.

This interview today is a part of the process of helping you in thinking about yourself as a teacher. I have a group of questions that are aimed at this purpose. There are no right or wrong answers to the questions and students will probably have lots of different ideas about them. We just want your opinions.

A.

1. a. How do you think pupils feel about school?
   b. What do you think has influenced them to feel this way?

2. a. What things about going to school do you think are most important to pupils?
   b. Why do you suppose that they are important?

3. a. Do you think pupils try to do well in school or do you feel that they could do better than they do?
   b. How imprtant is it that pupils do well in their school work?

4. a. How do you think pupils react to teachers who emphasize doing well in school?
   b. Why do you suppose that this is true?

5. a. How do you think a pupil's achievement affects his getting along with others in his group?
   b. Why do you think it happens this way?

6. a. Some teachers feel that they must demand high achievement standards, because children won't realize the importance of achievement until they are older. Others disagree. How do you feel about it?
   b. Explain a little more about what you have said?

B.

1. a. If it is the teacher's job to help students learn to be well behaved, how does the teacher decide what kinds of behavior will be acceptable?
   b. What is the importance of rules?

2. a. Some teachers say that children need a great deal of freedom in school, others say not. How do you feel about it?
   b. Tell me more about what you mean.

3. a. How important is it that children obey?
   b. Tell me more about your ideas on this?

4. a. Some people say that it is quite natural for pupils to yell, to shove, to push, and to fight. How do you feel about it?
   b. Some people also say that teachers should expect pupils to stretch stories, to imagine things happening that didn't really happen, etc. How do you feel about it?

5. a. What do you think are some of the main reasons why some pupils don't get along with their teachers?
   b. What do you think causes these situations?

6. a. Some people feel that above all a teacher must have the respect of the students. Do you agree?
   b. Why do you suppose you feel this way about it?

7. a. Some teachers feel that children can be allowed only limited choices because they are too young to know what is good for them. Others disagree. How do you feel about it?
   b. Explain a bit more about what you have said.

8. a. What do you think the ideal pupil is like?
   b. Is there anything else you would like to add?

Questions from Interview III

By now you are probably aware that the College of Education considers entrance into the junior year a pretty important step. You will begin your professional courses in education next year. In preparation for next fall you have been asked to take tests and have interviews and to look at the progress that you have made in the past two years. The main reason for this is to stimulate you to do some thinking about yourself and the profession for which you are preparing.

This interview today is a part of the process of helping you in thinking about yourself as a teacher. I have a group of questions that are aimed at this purpose. There are no right or wrong answers to the questions and students will probably have lots of different ideas about them. We just want your opinions.

A.

1. a. As you have thought about teaching as a career, what professional preparation or training would you feel teachers ought to have?
   b. Some people say that a liberal arts college education is all that is necessary. What do you think?

2. a. What is the importance of grades for those who are training to be teachers?
   b. Why do you suppose you feel this way?

3. a. Teachers have different opinions about the importance of belonging to professional organizations. How important do you think this is for teachers?
   b. Should all teachers belong or is this an individual matter?

4. a. What do you think teachers should be doing to improve themselves professionally?
   b. How important is this for teachers?

5. a. Some people feel that teachers do not work very hard to improve their teaching. How do you feel?
   b. Why do you suppose you feel this way about it?

6. a. Of all those who receive certificates to teach, do you think the bright ones of the group will make a lifetime career of teaching?
   b. Why do you feel this way?

B.

1. a. What do you think are the real reasons why most teachers have decided on teaching as a career?
   b. Are there other reasons that you think might apply to some teachers?

2. a. When teachers are in a social group with other members of the community, do you think they like to be known as teachers?
   b. Would it be different with men than with women?

3. a. What problems do you think teachers have in getting along well with their pupils in school?
   b. Why do you think these problems arise?

4. a. What would the successful teacher do to prevent discipline problems?
   b. How would the successful teacher handle discipline problems after they had arisen?

5. a. Do you think people in the community expect teachers to have higher standards for behavior than others?
   b. Do people with higher standards make better teachers?

C.

1. a. What things in life do teachers value most or believe are most important?
   b. How important do teachers feel it is to be well thought of by people in the community?

2. a. How much financial security is there in a career as a teacher?
   b. How important is this kind of security to teachers?

3. a. What opportunities are there for those who decide to go into teaching?
   b. How important are opportunities for advancement to teachers?

4. a. What opportunities do you feel teaching offers you?
   b. What do you hope to be doing four or five years after graduation?

Code ____________

Need for Dominance

5 4 3 2 1
High Low

Need for Integration

5 4 3 2 1
High Low

Need for Security

5 4 3 2 1
High Low

Do not fill in

n Dom ______
n Int ______
p Sec ______
Ach p ______
n Ach ______

Achievement potential

5 4 3 2 1
High Low

Need for achievement

5 4 3 2 1
High Low

Do you think this student will graduate from the College of Education?

Circle: Yes No

How sure are you of this judgment?

Very Certain	**Somewhat Certain**	**Not at all Certain**

Do not fill in

1.	**Yes**		**No**
	3	**2**	**1**
2.	**Yes**		**No**
	3	**2**	**1**

Do you think this student will enter the teaching profession?

Circle: Yes No

How sure are you of this judgment?

Very Certain	**Somewhat Certain**	**Not at all Certain**

Appendix B

Legend for Tabulated Raw Data

Column	Data
1	Counselor: 1, 2, 3,..., 7
2	Interview : 1, 2, 3
3	Student : 1, 2, 3,..., n
	Rating from Test Data Only
4	n Dom
5	n Int
6	p Sec
7	Ach p
8	n Ach
9	will graduate
10	enter teaching
	Ratings from Interview Only
11	n Dom
12	n Int
13	p Sec
14	Ach p
15	n Ach
16	will graduate
17	enter teaching
	Ratings from Test Data and Interview
18	n Dom
19	n Int
20	p Sec
21	Ach p
22	n Ach
23	will graduate
24	enter teaching
	Test Data
25-26	ACE Percentiles
27-28	HSR Percentiles
29-30	English Percentiles
31-33	HPR (Honor Point Ratio - two decimals)
34-35	Reading, Freshman - Standard Scores
36-38	MTAI, Freshman - Raw Scores
39-40	Miller, Junior - Standard Scores
41-42	Reading, Junior - Standard Scores
43-45	MTAI, Junior - Raw Scores

Data Sheet

Counselor ______________________ **Code #**__________________

ACE__________%

HSR__________%

Eng_________%

Freshman Test Scores	**Junior Test Scores**
Ohio__________%	**Miller**_________**SS**
Reading__________**SS**	**Reading**_________**SS**
MTAI________**RS**______%	**MTAI**________**RS**_____%

Credits_______

Honor Points_______

HPR________

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